

body, be it geometric, be it mechanical, be it chemical, be it vital, is subjected in its quantity to immense numerical variations altogether irregular, which succeed each other at the briefest intervals, under the influence of a host of circumstances exterior and interior, and themselves variable in such a way that all idea of fixed numbers, and in consequence of mathematical laws, such as we can hope to find, imply in reality a contradiction to the special nature of the class of phenomena. Times when we wish to value with precision even the most simple qualities of a living being—for example, its mean density, or that of one of its principal parts, its temperature, the force of its internal circulation, the proportion of immediate elements that compose its solids or its fluids, the quantity of oxygen which it consumes in a given time, the mass of its absorptions and continual exhalations, &c. and, still more, the energy of its muscular powers, the intensity of its impressions, &c.—it is needful, not only, as is evident, to make for each of these results as many observations as there are species or races, and of varieties in each species—we need further to measure the changes, not inconsiderable, which this quantity experiences in passing from one individual to another; and in reference to the same individual, according to its age, its state of health or disease, its internal disposition, and the circumstances of all kinds, and these incessantly changing, under the influence of which it finds itself placed, such as the constitution of the atmosphere, &c. It is the same, in a still higher degree, with social phenomena, which present a yet greater complication, and by consequence a yet greater variability." He goes on to say, "that which engenders this irregular variability of the effect, is the great number of different agents determining at the same time the same phenomena; and from which it results in the most complicated phenomena, that there are not two cases precisely alike. We have no occasion, in order to find such a difficulty, to go to the phenomena of living bodies. It presents itself already in bodies without life, when we consider the most complex cases—for example, in studying meteorological phenomena." This advocate of the progress and power of knowledge is obliged to admit,—"Their multiplicity renders the effects all irregularly variable as if every cause had not been subjected to a precise condition."

It is only in certain departments of God's works that we can ever attain to anything like complete science, to extensive foresight, or that power which knowledge confers. And let it be especially remarked that human science, and human sagacity, and human potency, fail most in those parts of nature which man is most intimately connected. As M. Comte again and again remarks, the phenomena which are the most simple and general, and therefore the most easily arranged into a science, are those which are at the furthest distance from man, and the furthest removed from humanity." Thus, the heavenly bodies, while utterly beyond man's reach or control, furnish in their laws and

movements the
 easiest conquests to science, The most difficult problem in
 astronomy—that of
 the three bodies—in less complex than the most simple
 terrestrial problem. On
 the other hand, those phenomena which are the most
 complicated are the nearest
 to man, and the most directly interesting to him. The laws of
 chemistry, for
 instance, on which man's sustenance so immediately depends,
 are more complicated
 than the movements of the heavenly bodies, or the mere
 mechanical laws of
 matter. The complication increases according as the objects
 attain a higher
 degree of organization, and becomes the greatest of all in the
 bodily frame of man,
 and, in that frame, in the nervous system, the part most
 intimately connected
 with the operations of the mind. When the social element is
 introduced, and

* Pp. 153, 150

t P. 88

l P. 90.